

REMARKS

Claims 1, 3-7, 12, 14-15, 19-22, 26, 28-53, 55 and 57-60 are pending. Claim 16 is currently canceled. Claims 36 to 53 and 55 have been withdrawn from consideration. Reconsideration of the application is requested.

Claim Objection:

Claim 16, which depends from Claim 12, was objected to as being in improper dependent form for failing to further limit the subject matter of Claim 12. Applicants have canceled Claim 16.

§ 103 Rejections

Claims 1, 3, 4, 5, 7, 12, 14, 15, 16, 19, 22, 26 and 57-60 are rejected under 35 USC § 103(a) as being unpatentable over JP Patent Publication No. 11-181367 (Hata) "Hata".

Applicants point out that JP Patent Publication No. 11-181367 (Hata) is equivalent to PCT Publication No. WO 99/24519 which is in English and will be referred to in the reply to this rejection.

The Examiner has stated that Hata teaches an article with at least one adhesive layer with first and second major surfaces wherein at least one surface is a structured surface, and a backing directly adjacent to the structured surface of the adhesive layer, wherein both surfaces of the backing are non-structured. The Examiner goes on to state that the article of Hata comprises discrete, encapsulated reservoirs between the structured surface of the adhesive layer and the backing and a non-structured adhesive surface that can be adhered to a target substrate.

The Examiner also states that Hata fails to disclose each reservoir having a void volume of less than 20 nL and the article having a peel strength of at 21-42 oz/0.5 inch for a thickness of 0.003 to 0.007 inches, the claimed volume of reservoirs, peel strength, and thickness of the tape.

The Examiner goes on to state that it would have been obvious for one of ordinary skill in the art to modify Hata to have the claimed ranges. In particular, the Examiner states that it would have been obvious to have modified the reservoirs of Hata to have a void volume of less than 20 nL since if the general conditions are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art in the absence of showing unexpected results.

Applicants point out that one of ordinary skill in the art cannot, from the teachings of Hata, achieve the articles of the present invention without the teachings of the present specification. Not only is there is no teaching, suggestion, disclosure or enablement in Hata that the articles formed with the protrusions of Hata would have such void volumes, in fact Hata teaches away from such articles. On page 8 of the WO 99/24519 publication on lines 18-23, in describing the volumes of depressions formed by the protrusions, Hata states: “That is, the volume of each depression enclosed by the protrusions is preferably in the range 1-600 mm³. If the volume of the depression is less than 1 mm³, the heat shielding and vibration resistance effect will tend to be reduced,...” Since 1 mm³ is equivalent to 1,000 nL, the minimum volume taught by Hata is 50 times larger than the maximum volume presented in the present claims. Further, Hata teaches away from smaller volumes by stating that smaller volumes would not permit the article to function in the way designed. The Examiner has stated that Hata does not teach away from the present volumes since the range of 1-600 mm³ is a preferred range, however, Applicants point out that Hata does indeed teach that volumes of less than 1 mm³ (1,000 nL) would reduce the heat shielding and vibration resistance and therefore Hata does teach away from the void volumes of the present claims, such void volumes are non-functional embodiments not merely non-preferred embodiments.

Applicants further point out that the preparation of a macroscopically large article does not teach, enable or suggest a microscopically small article with a similar structure. For example, if one wanted to prepare a rubber ball with a 1 inch (2.54 centimeter) diameter, such a ball would not be difficult to manufacture with present machine technology, and such balls are commonly used as toys. However, if one wished to prepare a rubber ball that was 50 times smaller than that (the difference between the minimum volume taught by Hata and the maximum volume of the present claims) one would need to prepare a rubber ball with a diameter of 0.05 centimeters or half of a millimeter in diameter. Such a ball would be difficult to make, would require different tools and equipment and would function quite differently. While such a ball might be useful for something, it would not be useful as a toy. If one compares the maximum volume taught by Hata to the maximum of the present claims, the difference is 30,000. One would have to prepare a rubber ball with a diameter of 0.000085 centimeters. Such a rubber micro-ball is so different from the 1 inch rubber ball that it could no longer be called a ball,

would not have the same properties as a ball, and clearly could not be prepared by the techniques used to prepare the 1 inch ball. Similarly, the microscopic reservoirs of the present claims are very different from the macroscopic reservoirs of Hata, and Hata provides no motivation (in fact teaching away from making smaller reservoirs) teaching or suggestion for the microscopic structures of the present claims.

The rejection of claims 1, 3, 4, 5, 7, 12, 14, 15, 19, 22, 26 and 57-60 under 35 USC § 103(a) as being unpatentable over JP Patent Publication No. 11-181367 (Hata) “Hata” has been overcome and should be withdrawn.

Claims 6, 20, 21 and 28-35 are rejected under 35 USC § 103(a) as being unpatentable over JP Patent Publication No. 11-181367 (Hata) “Hata” in view of PCT Publication WO 97/33946 (Hata) “Hata”.

Applicants point out that JP Patent Publication No. 11-181367 (Hata) is equivalent to PCT Publication No. WO 99/24519 which is in English and will be referred to in the reply to this rejection.

The Examiner has stated that Hata (JP 11-181367) fails to teach a second adhesive layer having a first and second major surface wherein at least one the first and second major surfaces is a structured surface, wherein the at least one adhesive layer and the second adhesive layer are in contact, and the first major surface of the first adhesive layer being a structured surface and the second major surface of the first adhesive layer being a non-structured surface and the first major surface of the second adhesive layer being a structured surface and the second major surface of the second adhesive layer being a non-structured surface, and the second major surface of the first adhesive layer contacting the first major surface of the second adhesive layer.

The Examiner is utilizing the second Hata reference (WO 97/33946) which teaches in Figure 3a the lamination together of adhesive layers to supply this lack in Hata (JP 11-181367).

All of these claims are dependent upon claim 1 which has been amended to include the description “each reservoir having a void volume of less than 20 nL”. There is no teaching, suggestion, disclosure or enablement in Hata (JP 11-181367) or Hata (WO 97/33946) for articles that have such void volumes. In fact, as described above, Hata (JP 11-181367) teaches volumes in the range 1-600 mm³ and Hata (WO 97/33946) teaches volumes of 0.8 to 600 mm³. Further,

Hata (JP 11-181367) teaches away from smaller volumes by stating that smaller volumes would not permit the article to function in the way designed. Therefore there is no way to combine these references and obtain the present claims, nor is there any motivation to do so based upon the teachings therein.

The rejection of claims 6, 20, 21 and 28-35 under 35 USC § 103(a) as being unpatentable over JP Patent Publication No. 11-181367 (Hata) “Hata” in view of PCT Publication WO 97/33946 (Hata) “Hata” has been overcome and should be withdrawn.

In view of the above, it is submitted that the application is in condition for allowance. Examination and reconsideration of the application as amended is requested.

Respectfully submitted,

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